

## WPI =====

- TI - Nozzle injecting type washing apparatus for dust, oil and components of aircrafts, electronic train, tram - has drive unit which moves cleaning nozzle for injecting cleaning liquid to stains on object, based on signal from nozzle controller
- AB - J10296194 The apparatus has a camera (2) which takes the image of an object mounted on a cleaning housing (1). An image processor (3) analyses the signal of the image from the camera for recognising the position of stains on the object.
- A nozzle controller (4) controls the position of a cleaning nozzle (6) which injects cleaning liquid on the object, based on the signal from the image processor. The cleaning nozzle is moved by a drive unit (5) based on the signal from the nozzle controller.
- USE - For motor vehicle, industrial equipment.
- ADVANTAGE - Provides reliable cleaning as stain of object is recognised correctly. Requires less cleaning liquid.
- (Dwg.1/1)

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PA - (MISK ) MITSUBISHI KAKOKI KAISHA

DC - P42 P43

IC - B05B12/00 ;B05B13/04 ;B08B3/02

AN - 1999-038980 [04]

## PAJ =====

- TI - NOZZLE JETTING TYPE WASHING DEVICE AND NOZZLE JETTING TYPE WASHING METHOD

- AB - PROBLEM TO BE SOLVED: To surely and efficiently wash an article to be washed by providing an image pickup device for recognizing the article to be washed mounted in a washing housing as an image, analyzing the output signal to discriminate a position, a shape and contamination of the article to be washed and controlling the position of a washing nozzle from the discrimination result.
- SOLUTION: An article A to be washed is fed into a washing housing 1 with a conveyer 7 and continuous split images are formed by two sets of image pickup devices 2 provided on the upper wall surface and the side wall surface. At this time, a position of the article A to be washed is detected with an object detection device 11, rotation of the conveyer 7 is controlled by a positioning control device 12 and the article A to be washed is stopped at an optimized position. Also, image information signals in two directions to the upper surface and the side surface from the image pickup devices 2 are analyzed with an image processing device 3, thus a position, a shape and contamination of the article A to be washed are discriminated and the discriminated information signals are transmitted to a nozzle control device 4. Based on the discrimination information signals, a nozzle drive device 5 is driven to move a washing nozzle 6 and the article A to be washed is washed.

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